#### STATE OF IOWA

#### DEPARTMENT OF COMMERCE

#### UTILITIES BOARD

IN RE:

MIDAMERICAN ENERGY COMPANY

DOCKET NOS. TF-01-293 WRU-02-8-156

# ORDER GRANTING WAIVER AND APPROVING, WITH CLARIFICATIONS, TARIFF

(Issued March 8, 2002)

On September 24, 2001, MidAmerican Energy Company (MidAmerican) filed with the Utilities Board (Board) a proposed net billing rate schedule, identified as Docket No. TF-01-293. The net billing tariff was filed pursuant to a settlement agreement entered into by MidAmerican, the Consumer Advocate Division of the Department of Justice (Consumer Advocate), and the Board to resolve pending litigation over net billing.

The terms net billing and net metering are often used interchangeably. Net billing or metering is generally used by small customers who generate electricity primarily for their own use by installing an alternate energy (AEP) or renewable energy facility. However, these customers are also linked to the utility grid so that they can receive power from the utility when they are unable to generate sufficient power to meet their needs. These customers also provide power to the utility when they generate power in excess of their own needs. Net metering allows a small producer to "net" the power flows to and from the utility during the monthly billing

period. In other words, if a net metering customer consumed 100 kWh from the utility in a month and generated 90 kWh, the customer would only pay the utility for 10 kWh. The meter runs forward and backwards and at the end of the month only the "net" amount of power flow is measured. Net billing involves the same netting process and the result is the same, but two meters are used, one to record power sent to the customer and the other sent to the utility flows in both directions is used. With advancing technology, power flows in both directions can now be recorded with a single bi-directional meter that is in essence two meters in one. Many utilities, and others, argue that this netting process in effect allows a customer to "sell" generation back to the utility at the utility's retail rate, rather than the lower avoided cost rate as calculated in the Public Utility Energy Policies Act of 1978 (PURPA).

The settlement was a vehicle to stay pending court proceedings so that the Board would have an opportunity to review MidAmerican's proposed net billing rate schedule. Pursuant to the settlement, the pending litigation is resolved only if MidAmerican's proposed tariff is approved by the Board. If the Board rejects the tariff or approves it with modifications that cause MidAmerican or Consumer Advocate to withdraw their support for the settlement, the settlement is null and void and litigation continues.

The net billing litigation began in 1997 and 1998 when three persons filed complaints with the Board. These persons sought to enter into net billing or metering arrangements with MidAmerican. MidAmerican declined, contending that it would result in MidAmerican paying an amount greater than its avoided cost as calculated

in PURPA. In all three cases, the Board ordered MidAmerican to enter into net billing arrangements. MidAmerican appealed the Board's decisions to Polk County District Court and the cases were consolidated for appeal (Case Nos. AA-3173, AA-3195, and AA-3196).

On August 24, 1999, the District Court reversed the Board's decisions and ordered the Board to stay the requirements of net billing arrangements pending the outcome of further administrative procedures in accordance with PURPA. The Board and Consumer Advocate appealed to the Iowa Supreme Court. The appeal was docketed as No. 99-1529.

Net billing litigation was also moving forward at the federal level. On October 8, 1998, MidAmerican filed a petition, denoted as Docket No. EL-99-3-000, with the Federal Energy Regulatory Commission (FERC) asking FERC to declare that the net billing arrangements ordered by the Board were preempted by federal law. On March 28, 2001, FERC denied MidAmerican's petition, finding that the net billing process reflected in the Board's proposed net billing arrangements was not preempted by federal law. MidAmerican asked for rehearing, which is being held in abeyance pending Board review of the proposed tariff. The lowa Supreme Court had not yet ruled or set the case for argument at the time the settlement was filed. If the proposed tariff is approved, the appeal to the lowa Supreme Court will be dismissed and the Polk County District Court will be asked to vacate its decision. MidAmerican will also withdraw its application for rehearing before FERC.

The settlement provided that interested persons would have 60 days to file comments on the proposed tariff. The Board issued an order on October 16, 2001, docketing the proposed tariff and allowing interested persons to file comments. Initial or reply comments were filed by the Iowa Renewable Energy Association (I-Renew), Tom Snyder, Martin Smith, Tyler McNeal (Windway Technologies, Inc.), Greg Swecker, Phillip Funk, Consumer Advocate, Alliant Energy (Alliant), the Iowa Department of Natural Resources (IDNR), and Thomas Wind, P.E. The comments addressed one or more issues raised by the proposed tariff. No one requested a formal contested hearing. The written comments presented the various arguments extremely well and, therefore, no further proceedings are necessary and the Board will proceed to rule on the proposed tariff.

The proposed tariff offers net billing arrangements under terms and conditions as defined in the tariff. The Board will address ten issues that were raised by one or more commenters in determining whether to approve the proposed tariff.

#### 1. Size of Facility

The proposed tariff's 500 kW maximum size limit for net-billed facilities generated much comment. Some commenters argued that the 500 kW limit unduly restrained net-billed facilities, while others argued that net billing was designed for small producers and, therefore, the 500 kW limit was too high. Three commenters, MidAmerican, Consumer Advocate, and I-Renew, a group representing small users, supported the 500 kW limit.

Only two states, California and Ohio, allow net billing facilities in excess of 500 kW. In the 30 other states that allow net billing, the size limit is 100 kW or less. It is important to note that the Board's net billing rules, even though they do not contain a size limit, were originally intended for small customers installing AEP or other renewable generation, not large commercial AEP or renewable facilities. 199 IAC chapter 15.

MidAmerican in its reply comments noted that customers with generators larger than 500 kW could designate up to 500 kW as a net-billed facility and then request a standard AEP contract or PURPA purchase agreement for the balance of the facility's capacity. This option might require additional metering for which the customer would be responsible.

The 500 kW limit puts lowa at the forefront in encouraging net-billed facilities. The effect of the limit on net-billed facilities, MidAmerican, and other ratepayers can be evaluated over time. While 199 IAC 15.11(5) sets no size or enrollment limits, the Board has continued to maintain throughout the litigation that net billing was designed for small customers installing renewable generation for their own use, rather than for large customers or commercial applications. At the time 199 IAC 15.11(5) was adopted, no size limit was set because it was not envisioned that there would be large facilities that might want to take advantage of the rule. In the pending state litigation involving three facilities, the largest is 45 kW.

The Board finds the 500 kW limit, with the clarification provided by MidAmerican, reasonable. MidAmerican will be required to amend its tariff to clarify

its position in the comments that a customer with a facility larger than 500 kW can designate up to that amount as a net-billed facility, with the remainder subject to a standard AEP contract or PURPA purchase agreement. The Board, on its own motion, will waive 199 IAC 15.11(5) to the extent necessary to allow the 500 kW limit in the tariff. The waiver is identified as Docket No. WRU-02-8-156.

## 2. Treatment of Monthly Net Billing Credits

Several commenters objected to MidAmerican's proposed treatment of carrying forward net billing credits (i.e., customer generation in excess of customer usage), rather than treating them as purchases at avoided cost rates. However, this carry-forward of net billing credits actually allows intermittent generators to use seasonal production variations to their advantage. Rather than being forced to sell excess generation during high production months at lower avoided cost rates, as currently required by 199 IAC 15.11(5), the carry-forward provision in the proposed tariff allows these excess generation amounts to be used in future billing months when the customer's own energy production is lower.

As noted by the commenters, the excess generation is carried forward continuously and never "cashed out" or sold to MidAmerican. While PURPA entitles customers to sell their excess generation at avoided cost rates, PURPA does not entitle customers to net billing. Net billing customers may, however, consistent with the discussion on size of the net-billed facility, designate up to 500 kW as their net-billed facility, with a standard AEP or PURPA purchase agreement covering the balance of the facility's capacity.

Combined with its clarification to designate only part of a facility as a net-billed facility, MidAmerican's carry-forward proposal for net-billed facilities is reasonable and, in fact, should encourage net billing. The Board will waive 199 IAC 15.11(5) to allow the carry-forward. The Board notes that this waiver will not directly impact Alliant's current practice of treating any monthly credits as purchases at avoided cost rates. Any changes to Alliant's current practice are beyond the scope of this docket and would have to be addressed in another docket.

## 3. Standard Metering

MidAmerican's proposed tariff provides for the use of bi-directional metering, but several comments pointed out that the tariff does not specifically address who should pay for the additional cost for such a meter. MidAmerican in its reply comments clarified that while MidAmerican intends to install one meter capable of measuring flows in both directions, net billing customers will not be required to pay any additional metering costs beyond their standard service rates. Instead, MidAmerican will seek to recover the additional metering costs from the customer's class in MidAmerican's next general rate case. The Board will therefore require MidAmerican to amend its tariff to reflect its intent that any additional cost for bi-directional metering is not a "reasonable interconnection cost" directly recoverable from the net-billed facility.

Alliant commented about the need for independent metering of customer generation and usage. These comments appear to relate to Alliant's concerns about

its EAC cost recovery and will not be addressed in this docket. Any changes to Alliant's current net billing practices would have to be addressed in a future docket.

## 4. Special Metering

MidAmerican's tariff provides for special real-time metering for a sample of net-billed facilities in consultation with the Board and Consumer Advocate. The data may be useful to MidAmerican, the Board, Consumer Advocate, and other interested persons in assessing alternate energy policy and the value of net billing to MidAmerican's system.

Some commenters were concerned the cost of the real-time metering would be borne by the net-billed facility. MidAmerican in its reply comments clarified that net billing customers will not be required to pay any additional metering costs beyond their standard service rates. Instead, MidAmerican will seek to recover additional metering costs from the customer's class in MidAmerican's next general rate case. The Board will require MidAmerican to clarify its tariff to coincide with its comments that any additional cost for special hourly or real-time metering is not a "reasonable interconnection cost" directly recoverable from the net-billed facility.

## 5. Telephone Influence Factor Standards

I-Renew, Tom Snyder, Phillip Funk, and Alliant commented that the telephone influence factor standards in the proposed tariff are redundant and should be deleted. MidAmerican agreed in its reply comments. The Board will therefore require MidAmerican to amend its tariff by removing the telephone influence factor standards on tariff sheets 3 and 4.

#### 6. Interconnection Costs

Under the proposed tariff, MidAmerican would recover all <u>reasonable</u> interconnection costs directly from the net-billed facility, consistent with 199 IAC 15.8. (Emphasis added). Several commenters were concerned these costs could be excessive and some asked that a cap of \$100 be placed on those costs.

As noted by Consumer Advocate, interconnection costs must be reasonable and, upon request, MidAmerican will provide a non-binding estimate. If a customer believes the estimate is unreasonable, a complaint can be filed with the Board.

The cost language proposed by MidAmerican is virtually identical to language that has been part of the MidAmerican southern zone's tariff, formerly lowa Power and Light Company, since 1981. The language reflects the policy contained in the rule that small power producers and cogenerators should pay all costs of interconnecting with a utility because those costs would not have been incurred but for the customer's interconnection. The tariff language has generated few prior complaints.

The interconnection language is reasonable and consistent with the Board's rules. The broader question of whether the Board's current interconnection policy should be changed is beyond the scope of this tariff filing. The Board will monitor customer complaints on this issue and, if warranted, could take future action in the form of an inquiry or administrative rule revisions.

#### 7. Interconnection standards

Interconnection standards generated substantial comment, with most of the commenters concerned that unreasonable or unnecessary technical requirements could be imposed. Because interconnection standards directly impact a facility's costs, those installing net-billed facilities are legitimately concerned at keeping interconnection requirements to a minimum. The utility, on the other hand, must be certain the facility will be properly integrated into its system so as not to cause damage or other problems that will impact other customers. If a vendor represents that additional equipment is unnecessary, that claim must still be tested by the utility, which adds to the facility's costs.

Interconnection verification issues would likely be reduced if there was an independent agency or laboratory that certified small generators, similar to what Underwriters Laboratories does for small appliances. While progress is being made on this issue, until it is resolved tension will likely continue between the claims of generation vendors and the utility's need for verification.

IDNR's suggestion on this issue, which was agreed to by MidAmerican in its reply comments, makes the following changes to Items A12 and A13 (Tariff Sheet 6):

- 12. The Net Billed Facility shall <u>have</u> install a relay or line contactor to prevent energizing a de-energized line.
- 13. The Net Billed Facility shall <u>have</u> install equipment capable of automatically interrupting the maximum system fault current at the point of installation.

This change means that net billed facilities will not be required to provide redundant mechanical devices that perform the same functions already provided internally. In other words, if the equipment required for interconnection is a built-in part of the net-billed facility, there is no requirement that this equipment also be installed separately. MidAmerican will be required to amend its tariff to reflect this clarification.

# 8. Coordination of Scheduled Outages

Alliant questioned why the proposed tariff provides that net-billed facilities larger than 100 kW are required to coordinate their scheduled outages with MidAmerican. However, because these facilities are required by 199 IAC 15.11(6) to provide energy and capacity on a "best efforts" basis, it is reasonable to coordinate outages so MidAmerican will obtain the maximum benefits to its system from net billed facilities.

#### 9. Responses to Interconnection Requests

The IDNR raised a concern that net billing applications and interconnection requests be timely processed by MidAmerican and suggested that MidAmerican be required to issue a decision on net-billed facility applications within 30 to 45 days. MidAmerican said it would make every effort to process applications in a timely manner but, to alleviate concerns about this issue, MidAmerican proposed to add the following language that is consistent with the requirements of MidAmerican's FERC-approved open access transmission tariff:

MidAmerican shall notify the customer no later than thirty (30) days after receipt of a completed application or request for information, if the customer is eligible and if MidAmerican will be able to provide the net-billing service. At that time, MidAmerican will request oral or written permission to perform a System Impact Study. Upon receipt of written or oral permission to perform the System Impact Study, MidAmerican will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify any system constraints or upgrades necessary to interconnect the eligible generator while maintaining MidAmerican's obligations to provide highquality and reliable electric service to all of its customers. In the event that MidAmerican is unable to complete the required System Impact Study within such time period, it shall so notify the eligible customer and provide an estimated completion date and an explanation of the reasons why additional time is required. MidAmerican retains the right to hire consultants, if necessary. MidAmerican will notify the customer before such consultants are hired.

MidAmerican's proposed language addresses IDNR's concern about timely responses to interconnection requests. The broader question of whether the Board should standardize or simplify interconnection requirements and procedures is beyond the scope of this tariff filing. The Board can monitor any future customer complaints on this issue and take further action as warranted, including rule changes or commencing a technical inquiry. MidAmerican will be required to file an amended tariff that reflects its proposed clarifying language to address IDNR's concerns.

## 10. Continued EAC Recovery

The final issue the Board will address is Alliant's concern about the precedent this tariff sets because, at this time, MidAmerican is not seeking recovery of net billing costs through an energy adjustment clause. The Board granted Alliant waivers

in Docket Nos. WRU-98-38-150 and WRU-99-39-151 to allow Alliant EAC recovery of net billing costs as a way to encourage net billing during the pendency of the state litigation. While resolution of the litigation may impact Alliant's waivers, those waivers are not directly at issue here and any changes to Alliant's net billing practices will be addressed in an appropriate docket.

It has been difficult to enforce the Board's net billing rules for the past decade because of pending or threatened litigation at the state and federal level. The proposed tariff allows net billing to move forward and provides for the termination of all pending litigation. Even if the tariff was rejected and all pending litigation resolved in favor of the Board's net billing rules, there is the likelihood of new or expanded litigation regarding size limits and other contentious issues. New or expanded litigation would continue to hamper the development of net-billed facilities.

The proposed tariff is reasonable and, with the clarifications noted in the order, will be approved. It is time for net billing to move forward and, if problems arise, discrete issues can be addressed individually rather than engaging in a global argument on the legality and value of net billing itself. The Board expects that as technology changes and additional information is gathered on the impact of net billing, one or more of the issues discussed may be revisited. At this time, however, encouragement of small renewable energy facilities through the use of net billing can best be accomplished by laying the broader arguments to rest and proceeding under the tariff filed by MidAmerican.

# IT IS THEREFORE ORDERED:

- 1. Tariff filing TF-01-293 is approved, subject to complaint or investigation, as clarified in the body of this order.
- 2. MidAmerican shall file within 20 days from the date of this order an amended tariff consistent with the clarifications contained in this order.
- The Utilities Board, on its own motion, waives the provisions of 199
   15.11(5) to the extent discussed in this order.

## **UTILITIES BOARD**

	/s/ Diane Munns
ATTEST:	/s/ Mark O. Lambert
/s/ Judi K. Cooper Executive Secretary	/s/ Elliott Smith

Dated at Des Moines, Iowa, this 8<sup>th</sup> day of March, 2002.